

## **EXPEDITED PROCEDURE - EXAMINING GROUP 1645**

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Michael A. Apicella et al.

Examiner: S. Devi

Serial No.:

09/077,572

Group Art Unit: 1645

Filed:

October 13, 1998

Docket: 875.001US2

Title:

NON-TOXIC MUTANTS OF PATHOGENIC GRAM-NEGATIVE BACTERIA

## AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.116

RECEIVED

Box AF Commissioner for Patents Washington, D.C. 20231 MAR 2 0 2001

TECH CENTER 1600/2900

In response to the final Office Action mailed February 21, 2001, Applicant respectfully requests that the Examiner consider and enter the following amendments and remarks in connection with the above-identified patent application.

## **IN THE SPECIFICATION**

Please delete the paragraph beginning on page 13 at line 27 and ending on page 14 at line 8, and insert the following paragraph therefor:

--Two plasmids, termed pB28 and pB29, each with a mini-Tn3 transposon containing the chloramphenicol acetyltransferase (CAT) gene inserted into the *htrB* open reading frame at a different location. Nontypeable *Haemophilus influenza* strains 2019 B28 and 2019 B29 were deposited on November 14, 2000 with the American Type Culture Collection, 10801 University Blvd., Manassas, VA 20110-2209 under the provisions of the Budapest Treaty, and all restrictions will be irrevocably removed upon the granting of a patent on this application. Strain B28 has been accorded accession number PTA-2667 and strain B29 has been accorded accession number PTA-2668. Each plasmid was used to transform nontypeable *H. influenzae* strain 2019 and bacterial cell transformants were selected for by growth in the presence of chloramphenicol (1.5 μg/ml), resulting in identification of mutant strains designated NTHi B28 and B29, respectively. Locations of the mTn3 insertion in the chromosomes of the NTHi mutants were confirmed by genomic Southern hybridization using the 2.4 kb *Bg1*II fragment as a probe. In particular, a *Bg1*II digest of NTHi strain 2019 DNA resulted in a 2.4 kb fragment; whereas